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A STUDY ON PROFILE OF SOCIO-ECONOMIC CONDITION OF FISHERMEN IN SELECTED VILLAGE IN KABIRDHAM DISTRICT, CHHATTISGARH STATE, INDIA

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ABSTRACT

There are 1.64 Lakh hectare average water area is available of fish culture in Chhattisgarh which require effective management for the welfare of poor fishermen. This study conducted a survey of socioeconomic condition of the fishermen's who fully or partly depend on fishing activities in two selected reservoir namely, Saroda and Chhirapani reservoirs in Kabirdham district, Chhattisgarh. The study evaluates the state of small-scale fishers, fishing operations, and cooperatives in terms of socio-economic indicators and success performance during 2016-17 fishing season in these reservoirs. During the survey, 83 fishers, all of whom cooperative members, were interviewed in six different fishing villages.

It was found that most of the fishermen were at the age group 31-40 years(38.6%), larger family size (4-6). About 46.6% fishermen on both the sites were illiterate with no person above secondary level and 17% were educated above secondary level. Housing condition of fishermen is mostly Katcha (67%) semi-pucca (22%) and pucca (11%).

The average annual household income of the land owner (LO) fishermen ranges from Rs 17396-566888 whereas average annual household income of the land less LL fishermen ranges from Rs 8407-36990 which is much below the poverty line. Agriculture is the main occupation and aquaculture are the main secondary occupations for the LO farmers. LL fishermen are mainly fulltime fishermen with agriculture and aquaculture labor being the main secondary occupations. Fish culture can improve their socioeconomic condition.

KEYWORDS: Chhattisgarh, Fishermen & Socio-Economic Condition

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INTRODUCTION

Chhattisgarh is the most water resourceful state in the central India. It is gifted with vast aquatic resources comprising village tank, reservoirs and ponds in addition to the four major river basins i.e. Mahanadi, Godavari, Ganga and Narmada with their tributaries. The state possesses vast and varied natural water area available for fish culture in the form of river, reservoirs, ponds and tanks. About 1.64 Lakh hectare average water areas are available for fish culture. Besides the state have major riverine system and their tributaries forming a network of 3573 km.

A number of fishing communities have developed in response to favourable factors. These communities can be divided into:

- Specialists or traditional groups who depend completely on fish and other aquatic resources for their subsistence
- Subsistence fishers or opportunists who depend partly on fish
- Groups who have recently started fishing.

There are three major fishermen community come under first category namely *Kewat, Dhimar* and *Malha*. As the name implies, this is a community of traditional boatmen and fishermen. The *Baiga* tribes come under second category, which partially depends on fishing.

The general aims of the study were to state economic viability of the fishing activity, through the estimation of some socio-economic indicators and economic performance. It was also aimed to determine success, problems and the obstacles of the fishing cooperatives, with regard to objectives of cooperatives, fishermen's satisfaction and several other criteria's to attract attention of central fishery management authority like DoF, Govt. of CG. The State is playing an important role by generating self-employment through fisheries in rural areas which in turn provides nutritious food to rural folks. Fisheries business has generated an employment potential for about 2.09 Lakh person, most of them belong to weaker section of the society.

There are 34 primary fisheries cooperatives in the district which require effective management for the welfare of poor fishermen. These management actions depend on livelihood status of the beneficiaries and policies need to implement should relate with the socioeconomic status and demands of the stakeholders. Saroda reservoir and Chhirapani reservoir are small reservoir situated under the village of Bodla block, of Kabirdham district, Chhattisgarh. The Chhirapani reservoir is constructed on the Fonk River and Saroda reservoir is constructed on the Uthaani River. They are open water body, connected nearby a local Fonk river and Uthaani river, respectively.

Government of Chhattisgarh (2016-17) state that, the various welfare program envisaged by the State Fisheries Department, to improve the living condition of fishermen like National Schemes, for Welfare of fishermen, Group Accidental Insurance Scheme, Development of fishermen villages (DFV), Saving cum relief, housing, health care, providing fishing assistance and established Fishermen welfare board. In spite of a reasonably good achievement in aquaculture development in the state, after adoption of the perspective plan by the government, to ensure fish for all in the state, there is still poor living standard of fishermen community in a states, which indicates that, there still exists a gap between traditional fishermen and modern fishing, which needs to be filled up with appropriate measures. They need to be educated and trained in terms of juvenile fisheries, importance of fishing ban etc. Regarding fishery cooperatives it was found that some cooperatives showed particular strengths and were partly successful but performed less than their potential due to many internal (lack of solidarity, lack of qualified business management), and external success factors (weak legislative support by government, lack of training). To conclude, they deserve more attention and encouragement to show better performance.

MATERIAL AND METHODS

The study has focused mainly on the fisher community of Kabirdham district districts in Chhattisgarh. It has used both secondary research of the available information and Primary Household Survey. From the complete list of fish

farmer's maintained society wise by the Department of Fisheries, Govt. of Chhattisgarh, 83 farmers were randomly selected from the different Primary fisheries cooperative societies who fully or partly depend on fishing activities in two selected reservoir namely, Saroda and Chhirapani reservoirs in Kabirdham district, Chhattisgarh. During the survey, 83 fishers, all of whom cooperative members, were interviewed in six different fishing villages.

The interview schedule was prepared for collecting data from the respondents. The schedule consisted of questions related to personal information; socio-demographic condition, income of fisher, and other relevant aspect of reservoir fishing were included in the questionnaires. Rapport building with the community was done using PRA tool. This process also helped in narrowing down the number of variables to be fixed for the quantitative survey. Personal interview technique was used for collecting the data. Secondary data from Department of Fisheries, records and various other reports were also consulted.

RESULTS

Fishery Structure in the Study Areas

In the study areas, fisheries target a variety of species such as IMC, Chinese carp, tilapia, *Channa sp*., *Notopterus sp*., *Ompak sp*., *Mystus sp*. and small fishes like goby fish, G*adusia chapra, Puntius sp. Ambasis sp. Amblypharyngodon mola, Rasbora sp. Chanda sp.* etc. Fishermen go to the fishing grounds in the evenings, where they set their gear and return home. In the early morning, they retrieve the gear and return to the port with their catch. However, sometimes the catch is brought home for household consumption.

The legal fishing rights across sources are granted by the Department of Fisheries through licensing process. Members have to register by paying the prescribed fee annually, which varies according to location, duration of contract, types of nets, and number of boats. Royalty have been taken by state fisheries department on total catch (kg) in daily basis.

Royalty amount paid by fishermen to DoF as given below (2015-16);

- For major carp (IMC and Chinese carp); Rs. 25/kg
- For local major (Catfishes, etc) ; Rs. 20/kg
- For local minor (*Puntius*, glassfish etc) ; Rs. 10/kg

Conflicts are caused about fishing rights given to different fishing communities in single reservoir. Although, there have been many conflicts between the fishermen cooperative societies regarding the ownership of reservoir, fishing rights, rising of seed (ranching).

Socio- Demographic Profile of Fishermen

Religion

Religion plays a vital role in the social and cultural environment of people in a given area (Khatun, *et al.* 2013). In the present study majority of farmers are found to be practicing Hinduism. However, no farmer is found to be practicing any other religion under this study (Table 1).

Caste

Caste is one of the important factors affecting the choice of the occupation and possession of skill in different rural economic activities (Singh 2003). Majority of farmers (36.4%) in the present study belong to *Kewat*, followed by

Dhimar (32.7%), *Malha* (22.2%) and (8.7%) *Baiga* tribe (Table 1).

Gender

Only 04 women (4.82%), out of 83 respondents from the districts, under study are found to be heading their households and they are mostly nominal member of primary fisheries, cooperative society.

Age structure (Figure 1)

Knowledge of age structure of fishermen is important in estimating potential productive human resources (Hussain, *et al.* 2009). In the present study, sample farmers were classified into four age groups such as up to 30 years, 31 to 40 years, 41 to 50 years and above 50 years. In this study, it was found that fishermen of 31-40 age groups were more in numbers (38.6%) and they were more active. The next group was 41-50 year followed by up to 30 year and minimum active fishermen were above 50 year group in selected 83 fishermen (Table 1).

Family Size

Family size is an important socio-economic indicator as it affects the income, food consumption and socio-economic wellbeing of the households. It is evident from baseline survey that larger family size average 5 members (Table 1).

Educational Status (Figure 2)

Literacy and education level of fisherman affects the knowledge level, skill development, exposure to production technology and marketing practices and adoption level of improved technology. Literacy rate of fishermen in the present study is found to be 53.4% as against the overall literacy rate of the state of 70.28% as per Census 2011 (Government of Chhattisgarh, 2016). Level of education is considered as one of the factors affecting utilisation of pond for fish farming (Khan 1986). It has only 17% were educated above secondary level. It might be due to impoverished condition and lack of awareness about education.

Housing Condition (Figure 3)

There are three types of houses in the study area such as 1) *Katcha,* that were made of bamboo and trees leaves with mud floor 2) Semi-*pucca,* that were made of brick in one part of either floor or wall, but the roof was in wood or tin and 3) *pucca* were made of brick. It was found that, 67% of the fishermen housing conditions were *katcha,* followed by *semi-pucca* (22%) and *pucca* (11%).

Annual Income

Income determines standard of living, income is highly correlated to almost all the indicators of well-being. Average per capita annual income, from both agricultural and non-agricultural sources for the farmer households, under the present study is found to be for the land owner (LO) fishermen, ranges from Rs 17396-566888, whereas average annual household income of the land less LL fishermen, ranges from Rs 8407-36990, which is much below the poverty line. Agriculture is the main occupation and aquaculture are the main secondary occupations, for the LO farmers. LL fishermen are mainly fulltime fishermen, with agriculture and aquaculture labor being the main secondary occupations.

Land Ownership

The fishermen have been categorized into two groups that are i) landowners (LO), who mainly cultivate crops in their lands during dry season are involved in fishing activities only during wet season as source of additional income and ii) landless (LL) fish farmers especially are full time fishers, depend on fishing almost round the year for their livelihood. About 62% fishermen (LO) have negligible agricultural lands and cannot get enough production and move towards secondary occupation i.e. fisheries.

Experience in Fish Farming

Experience plays a vital role in efficient utilisation of resources and getting better output in any venture particularly in fisheries sector as it is the core factor in generation of traditional knowledge. In the present study fishermen has wide range of experience of 6-27 years in fishing. Most of the respondents have belongs to traditional fishermen community and has tremendous indigenous knowledge in fishing.

Training about Fishing or other Related Matter

It has been observed in this study that about 68% fishermen have training on one or more related matter, 32% have no any training facilities. Department of fisheries provides some training program like reservoir fisheries, hatchery operation, Net meandering and inter-state exposure visit. College of Fisheries, Kawardha also gave 2 months training under VTP.

CONCLUSIONS

Considering the findings of the present work, it is clear that the livelihood status of the fishermen in Kabirdham district is not satisfactory. Fishermen are deprived of many amenities of life. Now a day's government give more emphasis on privatization of fisheries resource that leads decreases interest in fisheries. As a result the number of fulltime fishermen gradually decreasing in Kabirdham district. Unlike other state, CG government also enabling the policy and policy reform of fishing rights to the reservoir by many society cause conflicts among fishermen. It is expected that the study finding will help policy maker to take effective initiatives to implement developmental policies. Most of fishermen were less perceptive about modern capture fisheries techniques still they are fishing with traditional gear and craft. It was found that, landless fishermen mainly depend on fishing. They live below poverty line. They are mostly illiterate, their housing conditions are *katcha* and they used pit toilets.

Further studies should focus, on factors affecting both economic performance and the success of the individual fishermen and fishery cooperatives. The government should empower the fishing communities, including both men and women, to participate in decision making process. The society should recognise the role of fishing community to restore, conserve, protect and co manage reservoir. There is need of strengthening of DoF components, viz. Fishermen welfare board, training centre and fisheries federation under fishermen line.

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Table 1: Profile of Households by Category of Respondents

Sr. No.	Characters	Category	Frequency	Percentage
1	Religion	Hindu	83	100
		Muslim	-	-
		Christian	-	-
		Others	-	-
2	Caste	Kewat	30	36.4
		Dhimar	27	32.7
		Malha	18	22.2
		Baiga	7	8.7
3	Age structure	Below 30 years	14	16.9
		31-40 years	32	38.6
		41-50 years	26	31.3
		Above 50 years	11	13.3
4	Education level	Illiterate	39	46.6
		Primary	25	29.8
		Secondary	12	14.9
		Higher secondary	7	8.7
5	Family size	Small family (<4 members)	11	13.3
		Medium family (4-6 members)	46	55.4
		large family (>6 members)	26	31.3

Table 1: contd.,				
6	Family type	Nuclear	30	36
		Joint	53	64
7	Housing condition	*Katcha*	56	67
		Semi-*pucca*	18	22
		pucca	9	11
8	Economic Status	BPL	83	100
		APL	-	-
9	Social participation	Partcipant	53	64
		Non-participant	30	36

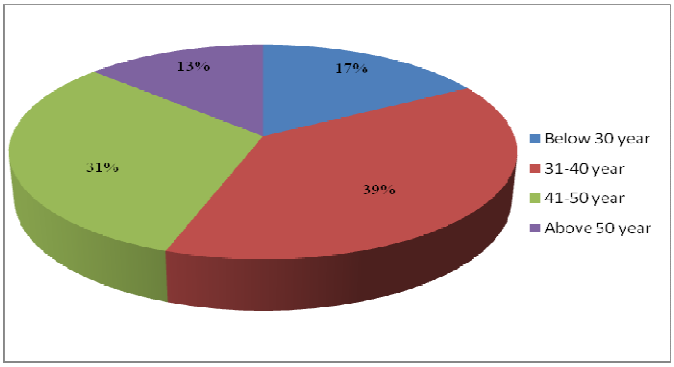

Figure 1: Age Structure of Fishermen

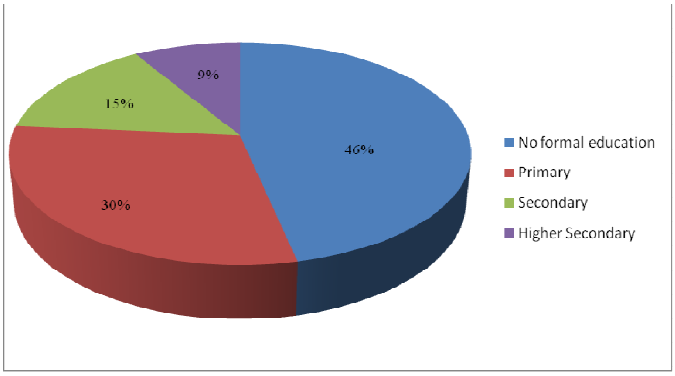

Figure 2: Educational Status of Fishermen

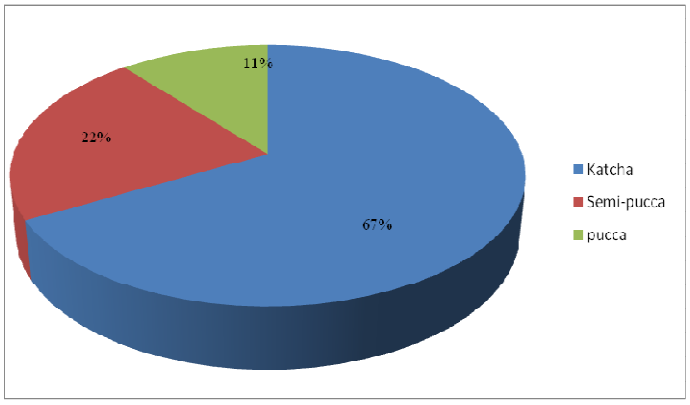

Figure 3: Housing Condition of Fishermen